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08/167,002 12/15/93 SAINTON

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EXAMINER

URBAN, E

26M2/1118  
SIXBEY, FRIEDMAN, LEEDOM & FERGUSON  
SUITE 600  
2010 CORPORATE RIDGE  
MCLEAN, VA 22102

ART UNIT PAPER NUMBER

5

2611

DATE MAILED:

11/18/94

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined  Responsive to communication filed on \_\_\_\_\_  This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1.  Notice of References Cited by Examiner, PTO-892.
2.  Notice of Draftsman's Patent Drawing Review, PTO-948.
3.  Notice of Art Cited by Applicant, PTO-1449.
4.  Notice of Informal Patent Application, PTO-152.
5.  Information on How to Effect Drawing Changes, PTO-1474..
6.  \_\_\_\_\_

**Part II SUMMARY OF ACTION**

1.  Claims 1-22 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims \_\_\_\_\_ are allowed.

4.  Claims 1-22 are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8.  Formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable;  not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner;  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved;  disapproved (see explanation).

12.  Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

**EXAMINER'S ACTION**

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**Part III DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

2. Claims 1-2, 4, 9-14, 16 and 21-22 are rejected under 35 U.S.C. § 103 as being unpatentable over Olson in view of Cunningham et al.

Olson discloses a radio frequency management system for reallocation of radio spectrum comprising frequency reallocating means to reassign temporarily radio spectrum from a wireless communication network and means 302 for causing portable radio control signals to change their operating frequency and protocol to permit the devices to communicate over the temporarily assigned radio spectrum. Also disclosed by the portable devices

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is a frequency agile radio transceiver 232 for operating between different networks, a "protocol agile" operating circuit 302,307,308 for operating the frequency agile transceiver in accordance with one of the protocols as determined by a protocol control signal from 304 and adaptive control means for accessing the selected network. Olson does not disclose the system containing capacity detection means for generating a frequency request to reassign the temporary radio spectrum. However, such a technique is common as shown by Cunningham et al. He discloses

a system in which channels, or radio spectrum, is temporarily "reassigned" based in response to a maximum capacity detection. Therefore, it would have been obvious to one having ordinary skill in the art to apply this channel reassigning technique of Cunningham et al. to the system of Olson for the simple purpose of acquiring a more efficient system. As to the use of a digital interface and a modem for interconnecting the transceiver with external devices, such as a facsimile device, such a technique is well known in the art and therefore would have been obvious to one of ordinary skill in the art in order to provide the user with increased versatility.

3. Claims 3,5-8,15 and 17-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Olson in view of Cunningham et al. as

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applied to claims 1-2,4, 9-14,16 and 21-22 above, and further in  
view of ~~Bi~~ et al.

Olson and Cunningham et al. both disclose everything claimed as explained above except for the selection of the network based on particular factors recited in claims 3-8. However, such criteria used to select between areas are common as shown by Gillig et al. He discloses a system in which a network is selected based on the cost of the system. Therefore, it would have been obvious to one having ordinary skill in the art to apply this selection technique of Gillig et al. to the modified system of Olson and Cunningham et al. for the purpose of providing the user with the lowest cost available to the user. As to the other recited criteria, such factors would have been obvious to one of ordinary skill in the art since one would want to provide a system that is more flexible to the user.

*Claim Rejections - 35 USC § 112*

4. Claims 1-22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-2,9-10 and 12-13, the phrases "and/or" and "adapted to" is unclear since it does not positively set

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forth the claimed subject matter. Also, in claim 1, line 10 and claim

13, line 9, "a frequency request signal" should be changed to --said frequency request signal-- for proper antecedent basis. Therefore, these claims are indefinite.

*Drawings*

5. The drawings are objected to because the box inside box 1 in figures 2,3,5,6A and 8 should have an appropriate descriptive label. Correction is required.

*Specification*

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sasuta et al., Kay et al., Bi et al., and Suzuki all disclose channel reallocation techniques.

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8.9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Urban whose telephone number is (703) 305-4385.

EFU  
November 13, 1994

*Edward Urban*  
EDWARD F. URBAN  
PRIMARY EXAMINER  
GROUP 2600